SEQUENCE LISTING

<110> AB Science

<120> Use of tyrosine kinase inhibitors for treating cerebral ischemia

<130> D21220 NT

<150> US 60/465,789 <151> 2003-04-28

<160> 5

<170> PatentIn Ver. 2.1

<210> 1

<211> 976

<212> PRT

<213> Homo sapiens

<220>

<223> Human c-kit

Met Arg Gly Ala Arg Gly Ala Trp Asp Phe Leu Cys Val Leu Leu Leu 1 5 10 15

Leu Leu Arg Val Gln Thr Gly Ser Ser Gln Pro Ser Val Ser Pro Gly 25 30

Glu Pro Ser Pro Pro Ser Ile His Pro Gly Lys Ser Asp Leu Ile Val

Arg Val Gly Asp Glu Ile Arg Leu Leu Cys Thr Asp Pro Gly Phe Val 50

Lys Trp Thr Phe Glu Ile Leu Asp Glu Thr Asn Glu Asn Lys Gln Asn

Glu Trp Ile Thr Glu Lys Ala Glu Ala Thr Asn Thr Gly Lys Tyr Thr  $85 \hspace{1cm} 90 \hspace{1cm} 95$ 

Cys Thr Asn Lys His Gly Leu Ser Asn Ser Ile Tyr Val Phe Val Arg

Asp Pro Ala Lys Leu Phe Leu Val Asp Arg Ser Leu Tyr Gly Lys Glu 115 120 125

Asp Asn Asp Thr Leu Val Arg Cys Pro Leu Thr Asp Pro Glu Val Thr

Asn Tyr Ser Leu Lys Gly Cys Gln Gly Lys Pro Leu Pro Lys Asp Leu

Arg Phe Ile Pro Asp Pro Lys Ala Gly Ile Met Ile Lys Ser Val Lys

Arg Ala Tyr His Arg Leu Cys Leu His Cys Ser Val Asp Gln Glu Gly

Lys Ser Val Leu Ser Glu Lys Phe Ile Leu Lys Val Arg Pro Ala Phe

Lys Ala Val Pro Val Val Ser Val Ser Lys Ala Ser Tyr Leu Leu Arg

	337	^ 1	004	10061	25																PC	T/I
WO 2004/096225								2/4														
Glu 225	Gly	Gl	u (	Glu	Phe	Th 23	r V	/al	Thr	С	ys	Thr	2	le 35	Lys	As	p '	/al	Se	r S	er 40	
Ser	Val	T	/r	Ser	Thr 245	Tr	p I	Lys	Arg	j G	lu	Asr 250	a S	er	Gln	Th	r I	Lys	Le 25	u 6	iln	
Glu	Lys	T	γr	Asn 260	Ser	Tr	p l	His	His	5 G	1 y 65	Asţ	P	he	Asn	Τ	r	Glu 270	Ar	:g (	31n	
Ala	Thr		eu 75	Thr	Ile	. S€	er :	Ser	Ala 280	а <i>Р</i> Э	rg	Va:	L A	sn	Asp	Se 28	er 35	Gly	Va	<b>1</b> 1	he	
Met	Cys 290		yr	Ala	Asr	n As	sn	Thr 295	Ph	e G	51y	Se	r P	Ala	Asr 300	v Va	al	Thr	Tì	nr '	rhr	
Leu 305		ı V	al	Val	Asp	5 L	ys 10	Gly	Ph	e :	le	As	n 1	11e 315	Phe	e P	ro	Met	I	le.	Asn 320	
Thr	Thi	r <b>V</b>	al	Phe	Va. 32	1 A 5	sn	Asp	Gl	у (	3lu	As 33	n \ 0	Val	Ası	) L	eu	116	: V 3	al 35	Glu	ı
Tyr	Gl	u A	la	Phe	Pr	o L	ys	Pro	Gl	u	His 345	Gl	n (	Gln	Tr	<b>1</b>	le	Тут 35(	: М )	et	Asn	1
Arç	j Th	r E	he 355	Thr	As	рL	ys	Trp	G1 36	.u 50	Asp	T	r	Pro	Ly	s S	er 165	Gl	.A A	sn	Glu	ג
Sei	As 37	n 1	[le	Arc	у Ту	r V	'al	Ser 375	G G 3	lu	Leu	Hi	s	Leu	Th 38	r <i>F</i> O	Arg	Le	u I	ys	Gly	Y
Th:		u (	Gly	Gly	y Th	r 1	Cyr 390	Th	r Pì	ne	Leu	ı Va	al	Ser 395	As	n S	Ser	As	p V	/al	As:	n 0
Al	a Al	.a :	Il∈	Ala	a Ph	ne <i>P</i> 05	Asn	Va	1 T	yr	Va]	. A	sn 10	Thi	. Ly	s l	Pro	Gl	u :	[le 415	Le	น
Th	r T	r.	Asp	Ar 42	g Le O	eu '	Val	As	n G	ly	Met 425	: L	eu	Gli	n Cy	's	Val	A1	a i	Ala	G1	У
Ph	e Pi	0	Gl 43	ı Pr	o Ti	nr i	Ile	As	р Т 4	rp 40	Тy	r P	he	Cy.	s Pi	0	Gl \ 4 4 5	Th	r	Glu	Gl	n
Ar		ys 50	Se	r Al	a S	er	Val	Le 45	u P	ro	Va	1 A	sp	Va	1 G	ln 60	Thi	: Le	eu	Asn	Se	r
S = 4 6		ly	Pr	o Pr	o P	he	Gly 470	/ Ly )	s L	.eu	۷a	1 V	al	G1 47	n S 5	er	Se	r I	Le	Asp	9 Se	er 30
Se	er A	la	Ph	e Ly	/s H 4	is 85	Ası	n Gl	.у Т	hr	Va	1 (	31u 190	Су	s L	ys	Al.	а Т	yr	Asr 495	A As	sp
Vá	al G	ly	Ly	's Th 5(	nr S	er	Ala	а Ту	yr E	?he	50	n 1	?he	: A1	a P	he	Lу	s G 5	ly 10	Ası	n As	sn
L	ys G	lu	G1 51	.n I:	le H	lis	Pr	о Н:	is '	Thr 520	. Le	u i	Phe	r T	nr F	ro	Le 52	<b>u L</b> 5	eu	116	e G	ly
P	he V	al 30	11	Le V	al A	Ala	Gl	у М 5	et 1 35	Met	: C)	/S	Ile	e I:	Le \	al 340	Ме	t I	le	Le	u T	hr
	yr I 45	ys	Т	yr L	eu (	Gln	Ly 55	s P	ro	Me	t T	yr	Gl	ه ۷۰ 5	al ( 55	Sln	Tr	p I	ys	٧a	1 V 5	al 60
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Glu Glu Ile Asn Gly Asn Asn Tyr Val Tyr Ile Asp Pro Thr Gln Leu 575

Pro Tyr Asp His Lys Trp Glu Phe Pro Arg Asn Arg Leu Ser Phe Gly 580 585 590

Lys Thr Leu Gly Ala Gly Ala Phe Gly Lys Val Val Glu Ala Thr Ala 595 600 605

Tyr Gly Leu Ile Lys Ser Asp Ala Ala Met Thr Val Ala Val Lys Met 610 620

Leu Lys Pro Ser Ala His Leu Thr Glu Arg Glu Ala Leu Met Ser Glu 625 635 640

Leu Lys Val Leu Ser Tyr Leu Gly Asn His Met Asn Ile Val Asn Leu 645 650 655

Leu Gly Ala Cys Thr Ile Gly Gly Pro Thr Leu Val Ile Thr Glu Tyr  $660 \hspace{1.5cm} 665 \hspace{1.5cm} 670 \hspace{1.5cm}$ 

Cys Cys Tyr Gly Asp Leu Leu Asn Phe Leu Arg Arg Lys Arg Asp Ser 675 680 685

Phe Ile Cys Ser Lys Gln Glu Asp His Ala Glu Ala Ala Leu Tyr Lys 690 695 700

Asn Leu Leu His Ser Lys Glu Ser Ser Cys Ser Asp Ser Thr Asn Glu 705 710 715 720

Tyr Met Asp Met Lys Pro Gly Val Ser Tyr Val Val Pro Thr Lys Ala 725 730 735

Asp Lys Arg Arg Ser Val Arg Ile Gly Ser Tyr Ile Glu Arg Asp Val 740 750

Thr Pro Ala Ile Met Glu Asp Asp Glu Leu Ala Leu Asp Leu Glu Asp 755 765

Leu Leu Ser Phe Ser Tyr Gln Val Ala Lys Gly Met Ala Phe Leu Ala 770  $\phantom{000}$  775  $\phantom{000}$  780

Ser Lys Asn Cys Ile His Arg Asp Leu Ala Ala Arg Asn Ile Leu Leu 785 790 795 800

Thr His Gly Arg Ile Thr Lys Ile Cys Asp Phe Gly Leu Ala Arg Asp 805 810 815

Ile Lys Asn Asp Ser Asn Tyr Val Val Lys Gly Asn Ala Arg Leu Pro 820 830

Val Lys Trp Met Ala Pro Glu Ser Ile Phe Asn Cys Val Tyr Thr Phe 835 845

Glu Ser Asp Val Trp Ser Tyr Gly Ile Phe Leu Trp Glu Leu Phe Ser 850 860

Leu Gly Ser Ser Pro Tyr Pro Gly Met Pro Val Asp Ser Lys Phe Tyr 865 870 875 888

Lys Met Ile Lys Glu Gly Phe Arg Met Leu Ser Pro Glu His Ala Pro 885 895

Ala Glu Met Tyr Asp Ile Met Lys Thr Cys Trp Asp Ala Asp Pro Leu 900 910

Lys Arg Pro Thr Phe Lys Gln Ile Val Gln Leu Ile Glu Lys Gln Ile 915 920 925

<220> <223> Primer <400> 5

gtcagacaaa atgatgcaac

4/4 Ser Glu Ser Thr Asn His Ile Tyr Ser Asn Leu Ala Asn Cys Ser Pro 935 930 Asn Arg Gln Lys Pro Val Val Asp His Ser Val Arg Ile Asn Ser Val Gly Ser Thr Ala Ser Ser Ser Gln Pro Leu Leu Val His Asp Asp Val 965 <210> 2 <211> 30 <212> DNA <213> Homo sapiens <220> <223> Primer <400> 2 30 aagaagagat ggtacctcga ggggtgaccc <210> 3 <211> 33 <212> DNA <213> Homo sapiens <220> <223> Primer <400> 3 33 ctgcttcgcg gccgcgttaa ctcttctcaa cca <210> 4 <211> 20 <212> DNA <213> Homo sapiens <220> <223> Primer <400> 4 20 agctcgttta gtgaaccgtc <210> 5 <211> 20 <212> DNA <213> Homo sapiens

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